

## **AMERICAN PRINTING HOUSE FOR THE BLIND**

*Serving visually impaired people since 1858*



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1987

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The modern APH plant occupies the same site as the first building, erected in 1883.

### Photographs on the cover:

Upper Left: This low vision child is improving her visual efficiency by using a light source from an APH instructional kit.

Upper Right: A talking book cassette player, such as this small model offered by APH, provides visually handicapped readers with hours of information and entertainment.

Middle: APH produces millions of pages of braille each year.

Lower Left: APH large type materials, such as this dictionary, provide access to print for low vision readers.

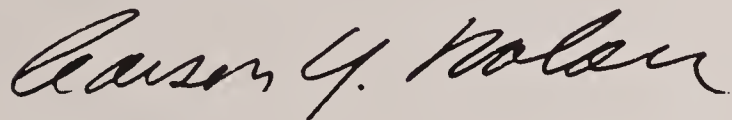
Lower Right: Talking software and hardware for microcomputers, created or modified at APH, allows visually handicapped people to use a wide variety of computer programs.

We would like to introduce you to the American Printing House for the Blind (APH), the world's largest manufacturer of educational books and aids for visually impaired people. This booklet will help to acquaint you with the many publishing and manufacturing activities in which APH engages.

As a nonprofit organization, APH depends on contributions from a generous public. This envelope is enclosed for you to make a donation if you wish.

Thank you and welcome to APH.

Carson Y. Nolan

A handwritten signature in cursive script that reads "Carson Y. Nolan". The signature is written in dark ink and is positioned above the printed name and title.

President



# AMERICAN PRINTING HOUSE FOR THE BLIND INC.

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## INTRODUCTION

The American Printing House for the Blind (APH) is the oldest public or private non-profit national organization in the United States for people who are blind. Today it is the world's largest independent publishing house devoted solely to producing materials for visually impaired persons. Its products include books and magazines published in braille, large type, and recorded form; writing and recording equipment for use by students and adults; tangible materials for teaching blind students; and special supplies used in education and by adults.

## HISTORY

Through the cooperative effort of several states, the American Printing House for the Blind was established in 1858 and incorporated as nonprofit in the Commonwealth of Kentucky. This project, located in Louisville, was disrupted by the Civil War and did not actually publish its first tactile book until 1866. By the early 1870s the Printing House was fully operational on a national scale. Its future as a permanent and official source of educational materials was assured when, in consequence of petitions by the American Association of Instructors of the Blind, the federal Congress passed in 1879 the Act to Promote the Education of the Blind.

The Act provides an annual appropriation to be used "each year in manufacturing and furnishing books and other materials specially adapted for instruction of the blind." Such materials are to be distributed free among all public institutions for blind students in the United States. Each institution is to receive a proportional share of materials based on the ratio between the number of its pupils and the total number of such pupils in

the United States. This total is established by an annual census conducted by the Printing House. No part of the appropriation can be used for buildings, and all materials furnished are to be manufactured to some extent at the Printing House. In 1879, the appropriation under this Act was \$10,000. Today it exceeds \$5,500,000.

Until 1879, the total annual budget for the Printing House was less than \$10,000, and there were never more than eight full-time employees. The annual budget currently exceeds \$13,000,000, and nearly 400 people are employed.

During its early years, the Printing House occupied space in the Kentucky School for the Blind. Its first building was erected in 1883 at a cost of \$15,000, furnished by the Commonwealth of Kentucky. Today the plant occupies over 250,000 square feet of building space with a replacement cost of over \$15,000,000.

Landmark events in the history of APH include:

- 1858 - APH is founded
- 1879 - The Act to Promote the Education of the Blind is enacted by Congress
- 1883 - First building erected
- 1912 - Blind students in public day school classes become eligible to receive APH materials
- 1928 - Publication of the first popular magazine, *Reader's Digest*®, in braille
- 1932 - English Braille Grade 2 adopted as the official tactile code for printing
- 1936 - Talking book studios established
- 1947 - Publication of large type textbooks started
- 1952 - Department of Educational Research established
- 1956 - All public school blind students become eligible for APH educational materials
- 1958 - Central Catalog textbook reference service established

Note: *Reader's Digest* is a registered trademark of The Reader's Digest Association, Inc. Pleasantville, NY 10570. *Newsweek* is a copyright of Newsweek, Inc.



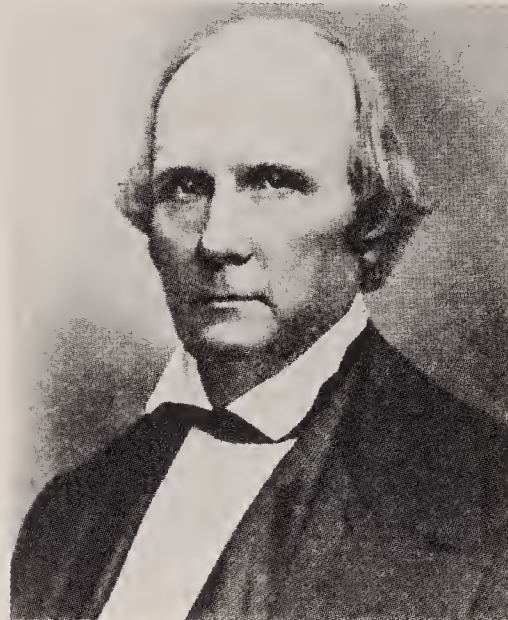
- 1959 - *Newsweek*® magazine first produced in recorded form
- 1964 - First system to produce computer translated braille books becomes operational
- 1970 - Blind students in parochial schools become eligible to receive materials from APH
- 1980 - First recorded encyclopedia produced
- 1986 - APH Braille Transcription Editors (electronic braillewriting terminals) become operational

## ADMINISTRATION

The responsibility for setting policy and for fiscal management rests with the Board of Trustees. Service on this Board has a long and honorable tradition among citizens of Louisville. Precedents for excellence in service were set early by the first President, James B. Guthrie (1858-1869). Mr. Guthrie was a nationally-known financier, Secretary of the Treasury under Franklin Pierce, strong contender for the Democratic nomination for President in 1860, and long-term President of the Louisville and Nashville Railroad. Since that time, prominent businesspeople, educators, attorneys, physicians, and others have given their services without remuneration as Trustees of the American Printing House for the Blind.

In addition, there is a Board of Ex Officio Trustees created for the purpose of administering the Act to Promote the Education of the Blind. This Board is composed of the superintendent of each institution for the education of visually handicapped students (or his/her designee) and the chief state school officer of each state (or his/her designee). Ex Officio Trustees are responsible for reporting the students in their educational system who are eligible to receive funds provided by the Act. The Board has two Advisory Committees, Publications and Educational Research and Development. The seven members of these committees serve three-year, rotating terms and are elected by the Ex Officio Trustees.

The operations of the Printing House are financed through the appropriation from the federal Act to Promote the Education of the Blind, cash sales of materials to institutions and individuals, contract work for other agencies, and public fund raising.



James B. Guthrie, APH's first President (1858-1869)



APH's original building, constructed in 1883, as it appeared in the 1930s.





Hellen Keller reads the braille edition of *Reader's Digest*, introduced by APH in 1928.

them, are used to write music, mathematics, science notations, foreign languages, and computer terms.

In spite of the shortcuts taken, braille is still a cumbersome method of publishing and reading. The braille edition of *The Pocket Dictionary*®, for instance, contains 1,792 pages in eight volumes. APH prints millions of pages of braille each year for books and magazines.

### Braille Translation and Plate Making

Each page in a braille book (with the exception of diagram pages) is embossed on both sides, as in an ordinary book, and both sides are pressed from one metal plate. These plates are made on a high speed plate embosser that is controlled by a computer. The computer uses information provided in braille form on a floppy disk. This braille information is generated in one of three different ways.

In the case of a relatively simple text, an optical character recognition unit (ocr) scans and records the print in computer-readable form. This information is translated into the shorter form braille by computer and stored on the floppy disk which drives the plate maker.

Where optical character recognition is not possible, key disk operators provide a letter-by-letter record of the print book for computer translation to braille as above. Because the present computer system is capable of translating only literary material, a third input method is necessary.

In this third method, the text is marked for braille by an experienced editor. The text is then given to a skilled brailist, who operates a machine called a Braille Transcription Editor. This microcomputer-based device provides a carriage return, a space bar, and six keys, each corresponding to one dot in a braille cell. To write a braille character, the operator must depress the combination of keys that produces the pattern of braille dots required. The output of this system is also a floppy disk.

## BRaille PUBLICATIONS

Braille is the best-known medium of reading for people who are visually impaired. This tactile reading system is based on the 63 possible combinations of raised dots arranged in a six-dot configuration called a *cell*, which looks like this:

1	●	●	4
2	●	●	5
3	●	●	6

Every letter in the alphabet and each kind of punctuation mark has its own symbol. In addition to these, English braille employs 189 *contractions* and *short form words*, which serve to abbreviate many words. For example, the letters *th* are represented by the symbol 

●	●
●	●

 which is a contraction.

The word *although* is represented by

●	●	●
●	●	●
●	●	●
●	●	●

a      l      th

which is a short form word. Other special codes, based on the same 63 dot combinations, but with different meanings assigned to

Note: *The Pocket Dictionary* is a copyright of Houghton Mifflin Co.



Diagrams are embossed on plates by a unique machine called the Plate Embossing Apparatus for Raised Lines (PEARL). This machine, designed at APH, is similar in principle to a sewing machine and has a choice of tips for embossing various styles of lines.

### Proofreading

Each method of braille production provides for a different first check on accuracy by the input operator. For final proofing, a paper copy of the material on the floppy disk is produced by a high speed braille embosser. A blind person reads the braille copy aloud, including all punctuation and capitals, to a sighted partner who has a print copy. Mistakes are marked on the braille copy and documented by the sighted copyholder on an error sheet. The marked copy is sent to the Braille Transcription Editor operator, who makes the corrections on the floppy disk. A second paper copy is then produced and the proofreading process is repeated. Once all corrections have been completed, the metal embossing plate is produced.

### Embossing and Binding

Braille pages are embossed on special presses using special paper. The paper is slightly damp when braille is embossed on it. This allows the paper to "give" a little during the embossing process so that the dots don't tear through it. This also allows the dots to dry to a firm raised configuration. (Braille magazines are embossed on dry paper, as they are not subject to prolonged use.)

After embossing, braille book pages are collated and folded by hand into sets of pages. Several such sets are fastened together by metal ring assemblies. Several of these ring assemblies are riveted into hard covers which have been stamped with the title in both print and braille. Braille magazine pages are automatically collated, stitched, and folded on a machine especially designed to handle this work without flattening the braille dots.



*The Pocket Dictionary* in braille and large type, shown with its standard print counterpart.





This Braille Transcription Editor is one of twelve machines which have replaced most of the mechanical stereograph plate makers.



An operator unloads a completed metal braille plate from the Plate Embossing Device (PED), which is driven by a floppy disk.



Above: Braille copy must be carefully proofread by a blind proofreader and a sighted copyholder in order to assure its accuracy.



Left: This braille press operator aligns a braille plate in preparation for embossing.



## LARGE TYPE PUBLICATIONS

The Printing House publishes large type textbooks for the benefit of visually impaired students who have sufficient vision to read larger-than-average type.

### Regular Run Large Type

To adapt a textbook with standard-size type to large type, it is first necessary to delete or rewrite visual references and delete or redraw pictures to make them more legible. The pages are photographically enlarged, usually to 18-point type (approximately 3/16 inch high). The printing and binding processes are similar to ordinary commercial offset printing. These books are reproduced in quantities of 50 to 100 copies. This process is called regular run large type reproduction.

### Short Run Large Type

In addition to regular large type reproduction of textbooks, APH employs two short run processes for the production of one or more copies of a title. The first method is similar in many respects to that used in regular run book production, but it makes only direct enlargements of the original copy, with no editing, stripping, or preparation of negatives. The size of the resulting type is limited by the page size allowed by the press and the original page and type size. Maximum enlargement is 150 percent. These books are made in a run of seven or more and then bound in a hard or soft cover. In the second method we enlarge books on a photocopier and ring bind them in a soft cover.

The short run process is quite useful when, for example, a teacher has only one visually impaired student and the text that the class is using is not available elsewhere in large type. The teacher sends the textbook to APH to be produced in short run for the visually impaired student.



To photograph and enlarge individual pages of a regular print textbook, a special camera is used.



These presses print short run large type books.



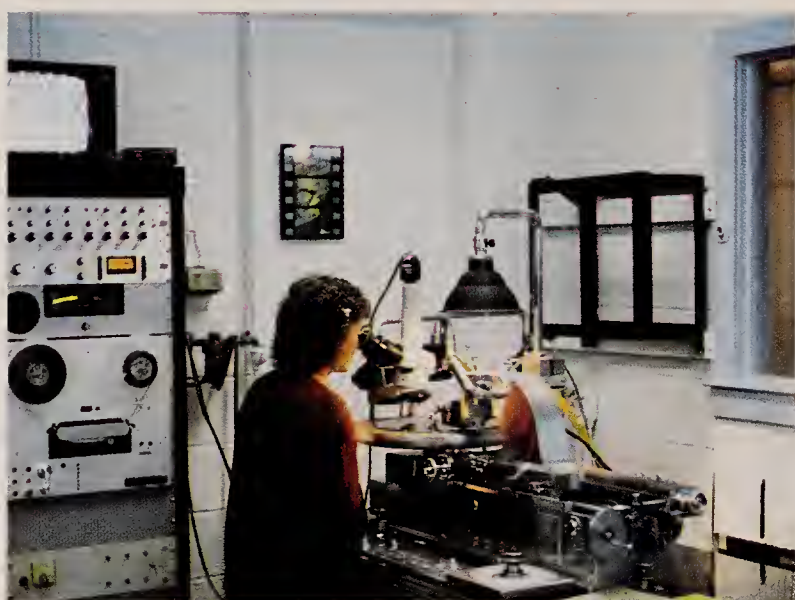
One of the uses of this paper cutter is to trim large type book pages to special sizes.





## RECORDED PUBLICATIONS

Many people who lose their sight after their normal school years choose not to learn braille. Some people find that reading braille is too time-consuming. Other handicapped persons are unable to hold a book to read. Recorded or "talking" materials often prove to be a major source of information and entertainment for these people. APH established its Talking Book Department in 1936 to provide recorded versions of a wide variety of books and magazines.



### Talking Book Studios

APH's recording studios are the hub of the Talking Book Department. Whether a book or magazine is to be produced on cassettes or flexible discs, it first must be read on tape in the studios. In order to provide the most entertaining presentation possible, professional narrators are employed. They are often actors, actresses, radio and TV personalities, college professors, salespeople, and others who use their voices frequently and have large vocabularies. Other requirements for good narrators are the abilities to bring a story to life, to pronounce every word correctly, and to read word for word. This can be a difficult job, since most books are not written to be read aloud.

To maintain a high standard of quality, a monitor works with every narrator, operating the recording equipment and listening for artistic excellence, as well as correctness. Monitors work much as a director in a play might, to help narrators present each book so that it may be fully enjoyed. After a reading is



Top: A monitor listens carefully as a narrator reads a book onto tape in one of APH's recording studios.

Middle: This technician cuts a master disc for flexible record production. Notice the magnification of the record grooves on the monitor at left.

Bottom: To produce cassettes, the master tape on equipment at left is duplicated on rows of "slaves."



completed, a proofreader reviews the book, again listening for accuracy and aesthetic effect.

### Talking Book Production

After a book is read and approved for production, it is manufactured in one of two forms: cassettes or flexible discs. Cassettes are produced on four tracks at a speed of 15/16 inches per second (half the speed of a commercial cassette). Nine-inch flexible discs with a playing speed of 8 1/2 rpm are stamped on thin plastic film. Not as durable as cassettes, they are disposable due to their low cost, which makes them ideal for use in recorded magazines. These cassettes and flexible discs must be played on special equipment, available to eligible impaired users only.

## SPECIAL EDITION MAGAZINES

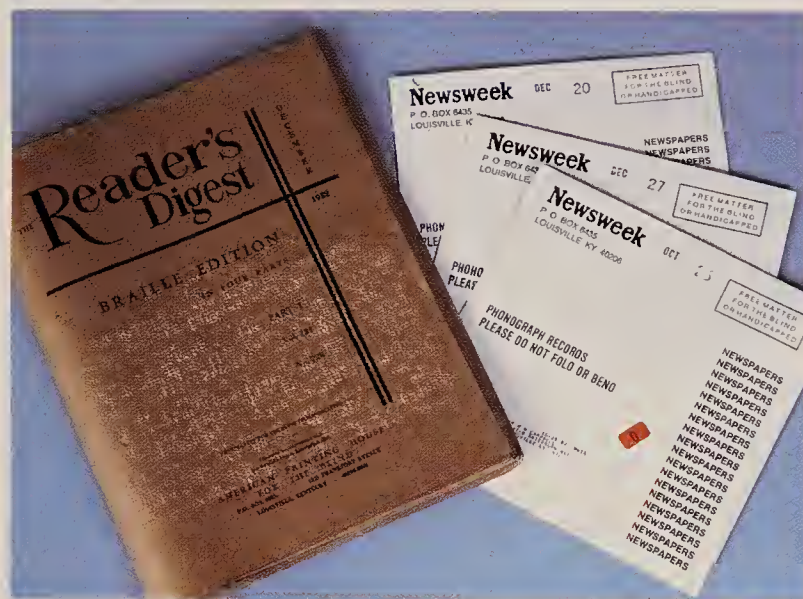
In 1928, the Printing House began publication of the first nationally-known magazine in a form that blind people could read for themselves. Originally, this braille edition of *Reader's Digest* was a condensed version provided only for students in the last years of high school. However, as these students graduated and knowledge of this first braille magazine spread, demand for the braille *Reader's Digest* grew rapidly. Public fund raising was initiated in the 1930s so that all braille readers would have the opportunity to receive *Reader's Digest*.

In 1939, a recorded edition of *Reader's Digest* was made available. A large demand for the magazine in this form resulted because most blind people lose their sight in adulthood and do not learn to read braille.

The publication of both editions of this magazine is supported by the Fund for Braille and Recorded Editions — *Reader's Digest*, which was established for this purpose. In the 1940s, the scope of this fund was broadened to enable contributions to be used to underwrite the cost of buildings and to finance the acquisition of the equipment required to produce the special editions. The Printing House acknowledges the great contribution

the publisher of the print edition has made by supplying the facilities for making their magazine and other braille and recorded publications accessible to blind people.

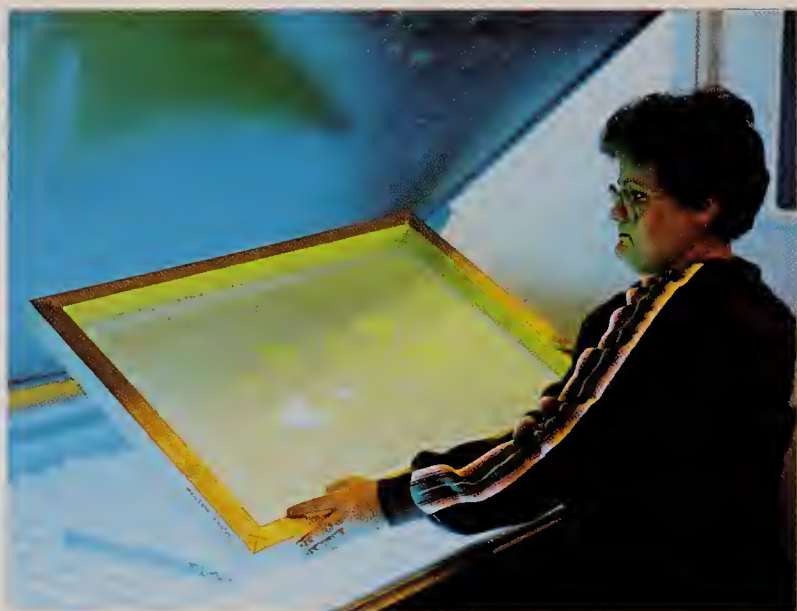
In 1959, publication of a second well-known periodical, *Newsweek*, was initiated. Published only in recorded form, distribution of this magazine is also subsidized by contributions from the public to the *Newsweek* Talking Magazine Fund. Through cooperation of the publishers of the print editions and contributions from the public, the Printing House provides these magazines free of charge to eligible readers across the nation.



Top: Braille *Reader's Digest* and flexible record *Newsweek*.

Bottom: A half million-piece fund raising mailing is being inserted in envelopes in preparation for shipment.





This worker operates a light exposure table, a part of APH's modern silkscreening system.



A worker removes plastic parts for an instructional aid from a vacuum-forming machine.



APH products include microcomputer items, such as this speech synthesizer (lower right) that allows voice access to a wide range of software.

## INSTRUCTIONAL AIDS AND OTHER APPLIANCES

The American Printing House for the Blind manufactures many kinds of aids for teaching visually handicapped students and many tools that they use in school and in daily living. Aids are provided for teaching reading, social studies, mathematics, and science. Many materials are provided for improving the use of low vision; teaching multihandicapped students; and facilitating sensory, motor, and conceptual development of very young blind children. Educational tools available from the Printing House include devices for writing braille, sound recording and play-back equipment, and special lamps. APH also carries software and hardware products that help visually handicapped people to learn about and use microcomputers.

Manufacturing processes include wood-working, metal working, and plastic molding. Color is provided through painting or silkscreening. Materials are especially designed to fit the needs of blind people and all are field tested in actual use before adoption for manufacture. Extensive evaluation is undertaken to ensure safety and durability. Most materials are accompanied by extensive instructions for use by the teacher or blind consumer.

The Printing House also provides a variety of special supplies for educational and personal use. Included are a number of special writing papers used by brailleists and persons with low vision, special binders and notebooks, and other materials used in the classroom.

## EDUCATIONAL RESEARCH AND DEVELOPMENT

The Department of Educational Research was established in 1952, when APH recognized the need for an organization to conduct ongoing basic and applied research in the field of blindness. In the ensuing years this department has grown and thrived. Long-term basic research has been conducted in such areas as communications, including studies on tactual perception, learning





This researcher charts data from a field test of one of APH's instructional aids.

through listening, and the perceptual factors involved in braille reading. Applied research has been undertaken as various educational needs have been identified. This research has resulted in the development of new materials, as well as the adaptation of existing materials, in the areas of mathematics, science, social studies, and reading readiness, among others. They are used not only by blind schoolchildren, but also in multihandicapped, preschool, and prevocational programs.

Research and development work is also done in other areas of APH. The Talking Book Department conducts continued research on recording technology and develops recording and playing equipment especially designed to meet the needs of blind people. The Data Processing Department works to develop improved technology to automate the production of braille and to apply current data processing technology to APH operations. In the Production Department, ongoing research is conducted to meet the ever-changing demands for materials and effective ways to manufacture them. Whenever feasible, these departments work closely together in their research and development efforts, toward the goal of improving APH's products and services.

## APH—CARL: CENTRAL AUTOMATED RESOURCE LIST

The Printing House maintains APH—CARL (Central Automated Resource List), a national data base providing information on special materials available for the education of blind students. Textbooks reproduced in braille, large type, and recorded form by APH, commercial producers, and volunteers constitute the bulk of the information in the data base. Special tangible materials available from APH and other sources are also an important part of this resource list.

Access to APH—CARL is available through subscription. A subscriber can search the data base via telephone using a microcomputer. For an extra fee, state agencies eligible to share in the federal appropriation for materials under the Act to Promote the Education of the Blind can manage directly the procurement of materials made available by this means.



This terminal is for data entry and retrieval on APH—CARL, a nationwide data base of educational materials for visually impaired students.



# ACT TO PROMOTE THE EDUCATION OF THE BLIND

*Summary Statement of Purpose of, and Authorizing Legislation with Regard to the Federal "Act to Promote the Education of the Blind"*

As Enacted by the Congress of the United States, March 3, 1879, and Amended: June 25, 1906; March 4, 1913; August 4, 1919; February 3, 1927; June 26, 1934; August 23, 1937; July 1, 1939; May 22, 1952; August 2, 1956; September 22, 1961; and April 13, 1970

*[The following statement of the purpose of, and the authorizing legislation with regard to, the Federal Act "To Promote the Education of the Blind" is a composite of the original Act of 1879 and subsequent amendments thereto to date, as enacted by the Congress of the United States, the last such amendment being approved April 13, 1970.]*

## Purpose

Whereas, the trustees, superintendents, and teachers of the various State and public institutions for the instruction of the blind, representing the interests of over thirty thousand blind persons in the United States, have united in a petition to Congress to take into consideration the needs of the blind in the United States; and

Whereas the Association of the American Instructors of the Blind, at their session in Philadelphia in August, eighteen hundred and seventy-six, representing twenty-six State and public institutions for the instruction of the blind, have set forth in a series of resolutions that the especial needs of the blind are embossed books and tangible apparatus, and have recommended that if any aid should be given by Congress it would most efficiently come through increasing the means of the American Printing House for the Blind, located in Louisville, Kentucky; and

Whereas it appears that the Kentucky legislature in eighteen hundred and fifty-eight, by an act of special legislation declared James Guthrie, W. F. Bullock, Theodore S. Bell, Bryce M. Patten, John Milton, H. T. Curd, and A. O. Brannin, and their successors, a body corporate, under the name and style of the Trustees of the American Printing House for the Blind, with the avowed purpose of printing books and making apparatus for the Instruction of the Blind of the United States, for general distribution, and for the sake of philanthropy, and with no desire for pecuniary gain; and

Whereas the States of Louisiana, Mississippi, Tennessee, Kentucky, New Jersey, and Delaware have made appropriations for the aid of said American Printing House for the Blind, of which, on account of the outbreak of the civil war, only a small part of the money appropriated by the first three named States was ever available; and

Whereas by the money from the States of Kentucky, New Jersey, and Delaware a printing house for the blind was established, and is now supplied with presses, type, stereotype foundry, steam engine, a well-equipped bindery, and all of the appliances necessary for the manufacture of embossed books, and has for

the last ten years been manufacturing embossed books superior in every way to any manufactured elsewhere, which have been distributed gratuitously to the blind in the States of Kentucky, New Jersey, and Delaware, by which the blind in those states have been very much benefited; and

Whereas it is desirable that the blind of the whole country should be equally benefited, and the intentions of the trustees to establish an educational institution of the most practical beneficence and wisest philanthropy upon a national basis, should be accomplished, inasmuch as the Education of the Blind is a subject to national importance: Therefore,

## Appropriations and Directives

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

### SECTION 1.

A. That the sum of two hundred fifty thousand dollars [\$250,000], shall be set apart and credited on the books of the Treasury Department as a perpetual trust fund; and the sum of ten thousand dollars [\$10,000], being equivalent to four percentum [4%] on the principal of said trust fund, be, and the same is hereby, appropriated out of any moneys in the Treasury not otherwise appropriated, and such appropriations shall be deemed a permanent annual appropriation and shall be expended in the manner and for the purposes analyzed by the Act approved March third, eighteen hundred and seventy-nine [March 3, 1879], entitled "An Act to Promote the Education of the Blind" approved March third, eighteen hundred and seventy-nine [March 3, 1879].

B. That for the purpose of enabling the American Printing House for the Blind more adequately to provide books and apparatus for the education of the blind there is hereby authorized to be appropriated annually to it, in addition to the permanent appropriation of \$10,000 made in the Act entitled "An Act to Promote the Education of the Blind," approved March 3, 1879, as amended, such sum as the Congress may determine.

### SECTION 2.

*[This section was abrogated by the Act of June 25, 1906.]*

### SECTION 3.

A. That the Secretary of the Treasury of the United States is hereby authorized to pay over, semi-annually, to the trustees of the American Printing House for the Blind, located in Louisville, Kentucky, and chartered in eighteen hundred and fifty-eight [1858] by the Legislature of Kentucky, upon the requisition of the president, countersigned by their treasurer, the semi-annual amount of \$5,000 due from the permanent trust fund.

B. That the Secretary of Health, Education, and Welfare is hereby authorized to pay over semi-annually, to the trustees of the American Printing House for the Blind, located in Louisville, Kentucky, and chartered in eighteen hundred and fifty-eight [1858] by the Legislature of Kentucky, upon requisition of their president, countersigned by their treasurer, one-half of such sum as the Congress may determine as an annual appropriation.



The use of all funds made available under the above provisions shall be according to rules and regulations prescribed by the Secretary of Health, Education, and Welfare, upon the following conditions.

First. The \$10,000 annual permanent appropriation from the Treasury Department, plus such sum as the Congress may annually appropriate through the Department of Health, Education, and Welfare:

(A) Shall be expended by the trustees of the American Printing House for the Blind each year in manufacturing and furnishing books and other materials specially adapted for instruction of the blind; and the total amount of such books and other materials so manufactured and furnished by such appropriation shall each year be distributed among all the public and private nonprofit institutions in the States, territories, and possessions of the United States, the Commonwealth of Puerto Rico, and the District of Columbia, in which blind pupils are educated. Each public and private nonprofit institution for the education of the blind shall receive, in books and other materials, upon requisition of its superintendent, that portion of the appropriation as is shown by the ratio between the number of blind pupils in that institution and the total number of blind pupils educated. Each chief State school officer shall receive, in books and other materials, upon requisition, that portion of the appropriation as is shown by the ratio between the number of blind pupils in the public and private nonprofit institutions (in the State) in which blind pupils are educated, other than institutions to which the preceding sentence is applicable, and the total number of blind pupils in the public and private nonprofit institutions in which blind pupils are educated in all of the States, territories and possessions of the United States, the Commonwealth of Puerto Rico, and the District of Columbia. The ratio referred to in each of the two immediately preceding sentences shall be computed upon the first Monday in January of each year; and for purposes of such sentences the number of blind pupils in public and private nonprofit institutions in which blind pupils are educated shall be authenticated in such manner and as often as the trustees of the American Printing House for the Blind shall require. For purposes of this Act, an institution for the education of the blind is any institution which provides education exclusively for the blind, or exclusively for the blind and other handicapped children (in which case special classes are provided for the blind); the chief State school officer of a State is the superintendent of public elementary and secondary schools in such State or, if there is none, such other official as the Governor certifies to have comparable responsibility in the State; and a blind pupil is a blind individual pursuing a course of study in an institution of less than college grade.

(B) The portion of the appropriation received by each chief State school officer, in such books and other materials under subparagraph (A) of this paragraph which represents the number of blind pupils in private nonprofit institutions in such State in which blind pupils are educated, shall be distributed among such institutions on the basis of the number of such pupils in all of the private nonprofit institutions in which blind pupils are educated in such State.

(C) All books and other materials furnished pursuant to this Act, and control and administration of their use, shall vest only in a public agency. Such books and

materials made available pursuant to this Act for use of teachers and blind pupils in any State, Territory, or possession of the United States, the Commonwealth of Puerto Rico, and the District of Columbia in any state shall be limited to those books and materials which have been approved by an appropriate educational authority or agency of such State, Territory, possession, Commonwealth, or District, or any local educational authority thereof, for use, or are used, in a public elementary or secondary school therein.

Second. No part of the appropriation shall be expended in the erection or leasing of buildings; but the trustees of the American Printing House for the Blind may use each year a reasonable sum of the annual appropriation for salaries and other expenses of experts and other staff to assist special committees which may be appointed in performance of their functions, and for expenses of such special committees.

Third. No profit shall be put on any books or tangible apparatus for the instruction of the blind manufactured or furnished by the trustees of the American Printing House for the Blind, located in Louisville, Kentucky; and the price put upon each article so manufactured or furnished shall only be its actual cost.

Fourth. The Secretary of the Department of Health, Education, and Welfare of the United States shall have the authority to withhold the appropriations for the education of the blind of the United States whenever he shall receive satisfactory proof that the trustees of said American Printing House for the Blind, located in Louisville, Kentucky, are not using the income from these appropriations for the benefit of the blind in public and private nonprofit institutions for the education of the Blind of the United States.

Fifth. *[Abrogated by Act of June 25, 1906.]*

Sixth. The superintendent of each institution for the education of the blind (or his designee) and the chief State school officer (or his designee), of each State and possession of the United States, the Commonwealth of Puerto Rico, and the District of Columbia, shall each, ex-officio, be a member of the Board of Trustees of the American Printing House for the Blind only for purposes of administering this Act.

Seventh. The distribution of embossed books manufactured by the American Printing House for the Blind at Louisville, Kentucky, out of the income of the fund provided by the Act of March third, eighteen hundred and seventy-nine [March 3, 1879] shall include one copy of every book so manufactured to be deposited in the Library of Congress at Washington.

#### SECTION 4.

The trustees of said American Printing House for the Blind shall annually make to the Department of Health, Education, and Welfare a report of the items of their expenditure during the year preceding their report, and shall annually furnish him with a voucher from each public or private nonprofit institution for the education of the blind, showing that the amount of books and tangible apparatus due has been received.



## EQUAL EMPLOYMENT AND AFFIRMATIVE ACTION

APH is an equal opportunity employer, dedicated to a policy of nondiscrimination in all personnel actions — including employment, promotions, compensation, benefits, and other conditions relating to employment privileges — and on any basis — including race, creed, color, age, sex, national origin, veteran's status, or mental or physical handicap — except where sex or mental or physical abilities are bona fide occupational qualifications.

## CONTRIBUTIONS AND BEQUESTS

### Contributions

Public support has enabled the American Printing House for the Blind to produce and distribute special editions of popular magazines for over fifty years. The braille and flexible disc *Reader's Digest* and the flexible disc *Newsweek* are provided free to eligible persons who cannot read ordinary print.

Perhaps you know someone who could benefit from these services. If so, please contact us.

Too, if you would like to help support the work of APH, we shall be pleased to receive your contribution. You may designate your gift to benefit one of the above special edition magazines, or you may make a general contribution, which benefits all phases of Printing House work.

### Form of Bequest

"I hereby give, devise, and bequeath to the American Printing House for the Blind, Inc., a corporation duly organized and existing under the laws of the Commonwealth of Kentucky, the sum of \_\_\_\_\_ dollars (\$ \_\_\_\_\_), the same to be applied to the said corporation under the direction of its Board of Trustees; and I do hereby direct that the receipt of the Treasurer for the time being of said corporation shall be a sufficient discharge to my executors for the same."



Throughout the U.S., interested people send cash contributions which are recorded and acknowledged daily.



Generous contributions and bequests help APH to create educational materials for visually impaired infants, youth, and adults.



# BRAILLE ALPHABET AND NUMBERS

Braille is the best-known medium of reading for people who are visually handicapped. This tactile reading system is based on the 63 possible combinations of raised dots arranged in a six-dot configuration called a *cell*, which looks like this:

```

1 ●● 4
2 ●● 5
3 ●● 6

```

Every letter in the alphabet and each kind of punctuation mark has its own symbol. In addition to these, English braille employs 189 *contractions* and *short form words*, which serve to abbreviate many words. Letters are capitalized by a prefix cell containing dot 6. The first ten letters of the alphabet prefixed by a number sign cell represent numbers. Punctuation marks are formed by various combinations of the dots in the lower part of the cell.

Other special codes, based on the same 63 dot combinations, but with different meanings assigned to them, are used to write music, mathematics, science notations, foreign languages, and computer terms.

1 a ●. . . . . . . .	2 b ●. . ●. . . . .	3 c ●● . . . . . . .	4 d ●● . ●. . . . .	5 e ●. . ●. . . . .
6 f ●● . ●. . . . .	7 g ●● . ●● . . . .	8 h ●. . ●● . . . .	9 i ●. . ●. . . . .	0 j ●. . ●. . . . .
k ●. . ●. . ●. .	l ●. . ●. . ●. .	m ●● . ●. . ●. .	n ●● . ●. . ●. .	o ●. . ●. . ●. .
p ●● . ●. . ●. .	q ●● . ●● . ●. .	r ●. . ●● . ●. .	s ●. . ●. . ●. .	t ●. . ●. . ●. .
u ●. . ●. . ●● .	v ●. . ●. . ●● .	w ●. . ●● . ●. .	x ●● . ●. . ●● .	y ●● . ●. . ●● .
z ●. . ●. . ●● .	,	.	?	
Capital sign ●. . ●. . ●. .		Number sign ●. . ●. . ●. .		

## LARGE PRINT

People with some residual vision are often able to do all or a part of their reading with their eyes. This is a sample of the 18-point type which is used in most of our regular run, large type books. Reading material is also reproduced in large type by our short run and M-method processes. The point size of these books varies depending on the size of the original copy.



## DEFINITION OF BLINDNESS FOR PURPOSES OF FEDERAL QUOTA REGISTRATION

For purposes of registration, only those pupils whose vision comes within the following definition of blindness can be registered:

“Central visual acuity of 20/200 or less in the better eye with correcting glasses, or a peripheral field so contracted that the widest diameter of such field subtends an angular distance no greater than 20 degrees.”



Public support has enabled the American Printing House for the Blind to produce and distribute special editions of popular magazines for over fifty years. The braille and flexible disc *Reader's Digest*® and the flexible disc *Newsweek*® are provided free to eligible persons who cannot read ordinary print.

Perhaps you know someone who could benefit from these services. Additional information is available on request.

Too, if you would like to help support the work of APH, we shall be pleased to receive your contribution. You may designate your gift to benefit one of the above special edition magazines, or you may make a general contribution, which benefits all phases of Printing House work.

☐ Please send detailed information concerning the:

☐ Braille *Digest*   ☐ Flex Record *Digest*   ☐ Flex Record *Newsweek*

☐ Cassette *Digest* (available by subscription only)

☐ Cassette *Newsweek* (available by subscription only)

[   ] Please accept my gift of \$\_\_\_\_\_ to the American Printing House for the Blind. (Gifts not designated for one of the above editions will be placed in the general fund.)

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

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